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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/640,230

08/16/2000

Peter V. Boesen

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07/14/2004

MCKEE, VOORHEES & SEASE, P.L.C.
801 GRAND AVENUE
SUITE 3200
DES MOINES, IA 50309-2721

EXAMINER

YUN, EUGENE

ART UNIT

PAPER NUMBER

2682

DATE MAILED: 07/14/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/640,230

Applicant(s)

BOESEN, PETER V.

Examiner

Eugene Yun

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 17 and 18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 4-9, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson (US 5,721,783) in view of Chen (US 5,664,012).

Referring to Claim 1, Anderson teaches a voice sound transmitting unit having the advantage of connectivity, the unit comprising:

an earpiece 10 (fig. 1) adapted to be inserted into the external auditory canal of the user and having one or more sensors 12 (fig. 1) adapted to convert vibrations of voice sound information to electrical signals, a speech processor 13 (fig. 1) operatively connected to the one or more sensors, a first transmitter 14 and 17 (fig. 1) operatively connected with the speech processor, and a first receiver 14 and 17 (fig. 1) operatively connected to the speech processor.

Anderson does not teach a cradle for supporting a host device, the cradle comprising a base, and at least one sidewall to form a cavity for supporting the host device, a connector mounted to the base for matingly connecting with an external connector of the host device, a second transmitter and a second receiver, the connector operatively connected to the second transmitter and the second receiver, the host device removably mounted in the cradle. Chen teaches a cradle for supporting a host

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device, the cradle comprising a base, and at least one sidewall to form a cavity for supporting the host device (see structure of cradle in fig. 2), a connector mounted to the base for matingly connecting with an external connector of the host device, a second transmitter and a second receiver, the connector operatively connected to the second transmitter and the second receiver, the host device removably mounted in the cradle and the second transmitter and the second receiver of the cradle adapted for communication with the first transmitter and the first receiver of the earpiece (see fig. 2 noting that the earpiece and microphone send and receive signals with the cradle, which the wireless phone is removable mounted to). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Chen to said apparatus of Anderson in order to increase the convenience of hands-free communication.

Referring to Claim 17, Anderson teaches a method of transmitting voice sound information comprising:

sensing the voice sound vibrations of the user through an earpiece 10 (fig. 1) adapted to be inserted into the external auditory canal of the user, the earpiece having one or more sensors 12 (fig. 1) adapted to convert the voice sound vibrations to electrical signals, and a speech processor operatively connected to the one or more sensors, a first transmitter, and a first receiver;

transmitting the voice sound information from the first transmitter to a second receiver F1 (fig. 2); and

receiving the voice sound information at the second receiver F1 (fig. 2).

Anderson does not teach a cradle for supporting a host device, the cradle comprising a base, and at least one sidewall to form a cavity for supporting the host device, a connector mounted to the base for matingly connecting with an external connector of the host device, a second transmitter and a second receiver, the connector operatively connected to the second transmitter and the second receiver, the host device removably mounted in the cradle. Chen teaches a cradle for supporting a host device, the cradle comprising a base, and at least one sidewall to form a cavity for supporting the host device (see structure of cradle in fig. 2), a connector mounted to the base for matingly connecting with an external connector of the host device, a second transmitter and a second receiver, the connector operatively connected to the second transmitter and the second receiver, the host device removably mounted in the cradle (see fig. 2 noting that the earpiece and microphone send and receive signals with the cradle, which the wireless phone is removable mounted to). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Chen to said apparatus of Anderson in order to increase the convenience of hands-free communication.

Referring to Claim 2, Anderson also teaches the cradle including a power source 920 (fig. 9).

Referring to Claim 4, Anderson also teaches the cradle including antennae 900, 902, 960, and 970 (fig. 9).

Referring to Claim 5, Anderson also teaches the host device as a cellular telephone 28 (fig. 2).

Referring to Claim 6, Anderson also teaches the host device as a computer (see col. 6, lines 21-25).

Referring to Claim 7, Anderson also teaches the host device as a personal digital assistant (see col. 6, lines 21-25).

Referring to Claims 8 and 9, Anderson also teaches the connectors as serial and parallel connectors (see col. 6, lines 21-25 where most computers are equipped with serial and parallel connectors).

Referring to Claim 18, Anderson also teaches the earpiece not occluding the external auditory canal of the user (see col. 3, lines 56-58).

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson and Chen in view of Puthuff et al. (US 6,181,801).

Referring to Claim 10, the combination of Anderson and Chen does not teach a headphone-jack type connector. Puthuff teaches a headphone-jack type connector (see col. 6, lines 19-21). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Puthuff to said apparatus of Anderson in order to expand the different methods a communication earpiece can be used.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson and Chen in view of Viallet (5,917,698).

The combination of Anderson and Chen does not teach the cradle including electromagnetic shielding. Viallet teaches the cradle including electromagnetic shielding (see col. 1, lines 56-67 and col. 2, lines 1-2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Viallet to said apparatus of Anderson in order to better increase the safety of smaller, high-powered communication devices.

Response to Arguments

5. Applicant's arguments filed 5/26/2004 have been fully considered but they are not persuasive.

The applicant argues that the Anderson reference does not teach an earpiece having a "speech processor". The examiner disagrees. The microphone in the Anderson reference (12 in fig. 1) receives acoustic speech signals from the user. In order for the earpiece to be able to wirelessly transmit the signals via antenna 14 (fig. 1) to another device, the speech signals must first be processed and converted into RF signals before transmission. Therefore, it is known in the art that in order for the earpiece in the Anderson reference to function, a "speech processor" or another processor with equivalent function must exist within the earpiece so acoustic speech signals can be processed and converted into RF signals before wireless transmission to a remote device.

The applicant also argues that the Chen reference does not teach a cradle comprising a second transmitter and second receiver. The examiner disagrees. The

second transmitter and second receiver in the cradle transmits and receives signals via the external wire which connects the speaker and earpiece device shown in fig. 2 of the Chen reference. There is no indication in the claim that the second transmitter and second receiver must be wireless. The Anderson and Chen references were combined simply to show that it is not unique to replace the external wire shown in fig. 2 of the Chen reference with wireless antennae.

Conclusion


6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugene Yun whose telephone number is (703) 305-2689. The examiner can normally be reached on 8:30am-5:30pm Alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (703) 308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Eugene Yun
Examiner
Art Unit 2682

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VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600